



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,301	02/08/2002	Eiji Hamamoto	020588	1113

23850 7590 06/03/2003

ARMSTRONG, WESTERMAN & HATTORI, LLP  
1725 K STREET, NW  
SUITE 1000  
WASHINGTON, DC 20006

EXAMINER

HON, SOW FUN

ART UNIT	PAPER NUMBER
----------	--------------

1772

DATE MAILED: 06/03/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/071,301

Applicant(s)

HAMAMOTO ET AL.

Examiner

Sow-Fun Hon

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear as to which layer, the polyvinyl alcohol layer or the protective film layer, the additional optical layer is bonded to.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hopper et al. (US 4,388,375).

Hopper et al. has a polarizing plate (polarizer) comprising a polyvinyl alcohol-based polarizing film containing a dichroic substance (iodine) and a transparent polyester-based film bonded to at least one surface of the polyvinyl alcohol-based polarizing film through an adhesive layer, wherein the adhesive layer comprises a water-soluble crosslinking agent (boric acid) capable of crosslinking a vinyl alcohol-based polymer. Since the polyvinyl alcohol adhesive layer between the polyvinyl alcohol film and the polyester substrate laminate (column 2, lines

Art Unit: 1772

20-65) is passed through the water-soluble boric acid aqueous solution as part of the laminate (column 6, lines 5-10), it follows that the polyvinyl adhesive layer comprises the water-soluble boric acid crosslinking agent capable of crosslinking a vinyl alcohol-based polymer. The laminate is a polarizing plate arranged on at least one surface of the liquid crystal cell in a liquid crystal display (polarizer carrier sheet or cover for a liquid crystal display) (column 4, lines 1-5).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hopper et al. in view of Buzzell (US 3,531,351).

Hopper et al. has been discussed above and teaches a polarizing plate comprising a polyvinyl alcohol-based polarizing film containing a dichroic substance and a transparent polyester-based protective film bonded to at least one surface of the polyvinyl alcohol-based polarizing film through an adhesive layer, wherein the adhesive layer comprises a water-soluble crosslinking agent capable of crosslinking a vinyl alcohol-based polymer.

Hopper et al., however, fails to teach that the transparent film can also be a triacetylcellulose film having a saponified surface.

Art Unit: 1772

Buzzell teaches a polarizing plate comprising a polyvinyl alcohol-based polarizing film containing a dichroic substance and a transparent polyester-based protective film bonded to at least one surface of the polyvinyl alcohol-based polarizing film (column 1, lines 25-75).

Since Buzzell teaches that triacetylcellulose film (cellulose triacetate) is preferred with a saponified surface (is hydrolyzed) to provide the capacity for adhesion of the layers upon bonding (column 4, lines 50-70), it would have been obvious to one of ordinary skill in the art to have used the triacetylcellulose film with the saponified surface in place of the protective polyester film in the invention of Hopper et al. in order to obtain an alternate laminate polarizing plate with better interlaminar adhesion.

7. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wada et al. (US 5,337,174) in view of Hopper et al.

Wada et al. has a liquid crystal display device with a retardation layer (1b) laminated onto the polarizing plate (polarizer) (column 13, lines 35-65). The polarizing plate comprises a polyvinyl alcohol film containing dichroic substance (iodine) bonded to a cellulose triacetate film (column 10, lines 1-20).

Wada et al., however, fails to teach that the polyvinyl alcohol film is bonded to the cellulose triacetate film through an adhesive layer, wherein the adhesive layer comprises a water-soluble crosslinking agent capable of crosslinking a vinyl alcohol-based polymer.

Hopper et al. has been discussed above and teaches a polarizing plate comprising a polyvinyl alcohol-based polarizing film containing a dichroic substance and a transparent polyester-based protective film bonded to at least one surface of the polyvinyl alcohol-based

Art Unit: 1772

polarizing film through an adhesive layer, wherein the adhesive layer comprises a water-soluble crosslinking agent capable of crosslinking a vinyl alcohol-based polymer.

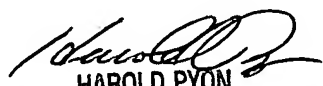
Hopper et al. thus demonstrates that it would have been obvious to one of ordinary skill in the art to have used an adhesive layer comprising a water-soluble crosslinking agent capable of crosslinking a vinyl alcohol-based polymer to bond the polyvinyl alcohol film containing dichroic substance to the cellulose triacetate film in the invention of Wada et al. in order to obtain a polarizing plate with good interlaminar adhesion.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (703)308-3265. The examiner can normally be reached Monday to Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (703)308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

SH  
Sow-Fun Hon  
05/30/03

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

6/2/03